### Characteristics of Rail and Ferry Station Area Residents in the San Francisco Bay Area: Evidence from the 2000 Bay Area Travel Survey

**Volume I** 

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#### **EXECUTIVE SUMMARY**

In July 2005, the Metropolitan Transportation Commission (MTC) adopted a development policy that supports transit-oriented development (TOD) in the region. MTC's TOD policy establishes guidelines for development near transit stations and in new corridors and ensures that key stakeholders (both public and private) work cooperatively to create more transit-supportive areas. In support of the TOD policy, this study was undertaken to characterize the demographic and travel characteristics of station area residents – individuals living within close proximity to rail stops and/or ferry terminals in the region – using an existing Bay Area data set, the 2000 Bay Area Travel Survey (BATS2000).

Residents surveyed in BATS2000 were grouped into six categories based on proximity to a rail/ferry station and population density of the area surrounding the household. The six distance/density categories are:

- 1) Residents within ½ mile of rail and ferry stops,
- 2) Residents between ½ mile and 1 mile of rail and ferry stops,
- 3) Residents greater than 1 mile from rail and ferry stops in an urban area,
- 4) Residents greater than 1 mile from rail and ferry stops in a high-suburban area,
- 5) Residents greater than 1 mile from rail and ferry stops in a low-suburban area, and
- 6) Residents greater than 1 mile from rail and ferry stops in a rural area.

Demographic and travel characteristics were then summarized for each group.

#### **Kev Findings**

Some of the most interesting findings from the BATS2000 study of station area residents are outlined below.

### **∨** People who live close to transit use transit extensively.

People living within  $\frac{1}{2}$  mile of a rail or ferry station are four times as likely to use transit than people living farther than  $\frac{1}{2}$  mile from a rail/ferry stop. Non-motorized mode shares are also high for station area residents who are twice as likely to walk and three times as likely to bike than residents living more than  $\frac{1}{2}$  mile from a rail/ferry stop.

**∨** People who live and work close to rail/ferry stops use transit even more extensively. Individuals living and working within ½ mile of a rail/ferry stop use transit for 42% of their work commute trips. Individuals who neither live nor work within ½ mile of a station use transit for only 4% of their work commute trips.

### **∨** San Francisco plays a unique role in transit use in the Bay Area.

People who live in San Francisco are much more inclined to use transit than most regional residents, but working in San Francisco also heavily influences transit use. Interestingly, the highest commute trip transit share was found for people who work in San Francisco but live elsewhere and who are close to rail/ferry transit at both trip ends. These residents use transit for 70% of their commute trips.

**∨** People who live close to transit make as many trips per day as those who live in the rest of the region, but these residents have a much higher tendency to use transit, walk, and bike.

## $\vee$ Nearly one-third of households living within $\frac{1}{2}$ mile of rail/ferry transit are zero-vehicle households, three times the regional average.

Combining this finding with income distribution for households near rail and ferry stops suggests that owning no or fewer vehicles is an individual choice for some people, rather than just as a function of income.

**∨** People living close to transit are likely to live in smaller households without children. Nonetheless, such households still comprise a variety of household types, with almost 30% of station area households including children, compared with 42% regionally, and 10% being retired households versus 15% regionally.

### **∨** Land use density has an impact on transit use levels, even beyond one-mile from a station.

Urban residents outside the one-mile distance from rail/ferry are still twice as likely as suburban residents and about four times as likely as rural residents to use transit (for work and non-work trips combined).

# **∨** Average weekday daily vehicle miles of travel (VMT) increases with distance from rail and ferries and decreasing density.

Households within ½ mile of rail stations/ferry produce about half of the VMT of their suburban and rural counterparts.

# **∨** People living close to rail/ferry transit are about twice as likely to walk for short trips (trips of one mile or less) than people living farther from transit.

People who live within ½ mile of rail or ferry walk about half of all their short trips (trips of up to one mile), compared with only about one quarter of such trips walked by residents outside this range.

### **Conclusion**

The results presented in this work clearly indicate that those living (and working) close to rail/ferry transit use transit, walk and bike much more than people living farther from a rail/ferry stop. Whether being near rail/ferry transit simply allows people who prefer to drive less that personal choice, or whether it creates a greater interest in such travel options, this research demonstrates that policies to support transit-oriented development hold promise as one important tool, among others, in addressing congestion, transit usage, non-motorized travel, and air pollution in the Bay Area.